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URBAN MUNICIPAL COLLECTION

THE HEALTH SCIENCES BRIEFS

VOLUME I: OVERVIEW

URBAN MUNICIPAL
JAN 9 1991
GOVERNMENT DOCUMENTS

THE HEALTH SCIENCES BRIEFS

VOLUME I: OVERVIEW

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VOLUME III: RESEARCH
VOLUME IV: HEALTH SERVICES

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THE HEALTH SCIENCES BRIEFS

VOLUME I: OVERVIEW

McMaster University is one of the oldest universities in Ontario. Founded in Toronto through a bequest from the estate of Senator William McMaster, it was incorporated in 1887 as a successor to Woodstock College and the Toronto Baptist College and operated under the direction of the Baptist Convention. In 1930, at the urging of businessmen and McMaster alumni in Hamilton, the University moved to its present location adjacent to the Botanical Gardens in the west end of Hamilton, on land donated by the city.

In 1942 McMaster added a combined Arts and Sciences program to its curriculum, and in 1946 a School of Nursing which prepared students for a baccalaureate degree. In 1948 the University created a non-denominational affiliated institution, Hamilton College, as the centre for the School of Nursing and the sciences, and retained the arts, social sciences and theology under the continued direction of the Baptist Convention.

Increasing enrollment during the post-World War II years made it necessary for McMaster to seek a broader base for financial support, and in 1957 the University reorganized, merging with Hamilton College to become a private, non-denominational institution eligible for public funding. The School of Nursing and the departments of Science, Engineering, Humanities, Social Sciences and Physical Education became part of a Faculty of Arts and Science, while the theology school was separately incorporated as McMaster Divinity College, an independent, campus-based institution which preserved the historic Baptist connection.

McMaster embarked on a vigorous government-financed program of expansion, and over the next five years several new facilities were constructed, including an engineering building, an expanded physical sciences building, and Canada's first on-campus nuclear reactor.

In 1965, with the support of the Ontario government, the University established an innovative medical school which in philosophy and form departed radically from the traditional model. The medical school became part of a Division of Health Sciences within the Faculty of Arts and Science. Several graduate programs were added to the Division of Health Sciences between 1969 and 1973, offering degrees at the MSc and PhD levels and a Master of Health Sciences in Health Care Practice.

The University constructed a Health Sciences Centre adjacent to the existing campus to house the educational, research and administrative activities of the Division of Health Sciences as well as an on-campus hospital. This award-winning building, designed by Eberhardt Zeidler of the Toronto architectural firm of Craig, Zeidler and Strong, was officially opened in 1972.

The University and the Hamilton hospitals, community health groups and health professionals developed cooperative arrangements for education, research and health services. Collaborative programs were established with Mohawk College of Applied Arts and Technology, an arrangement which enabled the university and college to benefit from each other's resources.

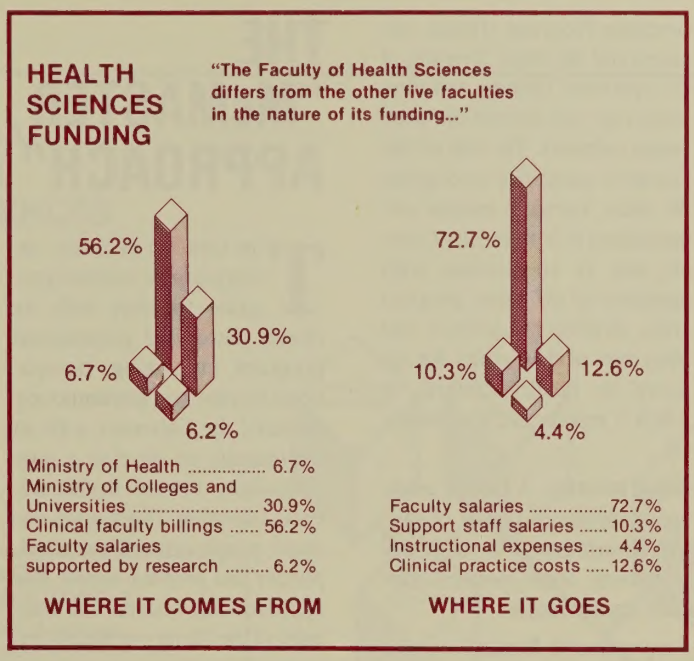
In 1974 the Division of Health Sciences became a Faculty of Health Sciences, and the School of Nursing became part of the new Faculty. A number of Continuing Health Sciences Education programs were added to provide practising health professionals with opportunities for educational development. In 1981 a program offering a Bachelor of Health Sciences in Occupational Therapy and Physiotherapy was established to provide graduates of diploma programs in Occupational Therapy and Physiotherapy with the opportunity to proceed to a baccalaureate degree.

Today McMaster has Faculties of Business, Engineering, Humanities, Science, Social Sciences and Health Sciences, as well as a Program in Arts and Science, and its teaching and research activities cover a broad range of scientific, medical, cultural and professional fields.

Current student enrollment in the University is close to 18,000, including 11,000 full-time and 3,000 part-time undergraduates, 1200 full-time and 700 part-time graduate students, and 2,500 summer students. The University has 1,000 full-time faculty members, as well as many part-time teachers paid by the University and the teaching hospitals, and other faculty whose work is either voluntary or funded from other sources. Administrative and support staff for the University number approximately 2,500, making McMaster one of the city's larger employers.

The University's senior administrative officers are the President, who is responsible to the Senate and Board of Governors and to the Ministry of Colleges and Universities; three Vice-Presidents - (Administration), (Academic), and (Health Sciences); and six Deans. Each Vice-President is responsible to the President, and the Vice-President (Health Sciences) has an additional responsibility to the Ontario Ministry of Health and other external bodies. Each Dean is responsible to the Vice-President (Academic), while the Dean, Health Sciences, has an additional responsibility to the Vice-President (Health Sciences).

THE FACULTY OF HEALTH SCIENCES occupies a unique place within the University, differing from the other five Faculties in an important area — the nature of its funding. Virtually all monies for the other Faculties come from the Ministry of Colleges and Universities, student fees, and outside research grants. The Faculty of Health Sciences, on the other hand, derives less than half its funding from these sources; the balance comes from the Ministry of Health (for clinical education and the delivery of health care) and the clinical earnings of faculty members.



McMaster AV

THE MATRIX

The Faculty of Health Sciences has adopted a "matrix" form of organization which has been instrumental in helping it achieve its objectives. Matrix management is intended to maximize the contribution of faculty members in setting policies and priorities, in controlling faculty appointments, in setting criteria for tenure, promotion and salary levels, and in maintaining an effective and efficient partnership with affiliated institutions for education, research and the delivery of health care.

The Faculty is organized on the one hand into Departments and the School of Nursing, and on the other into three programmatic areas - Education, Research, and Health Services - which draw upon the resources of the departments.

Vice-President (Health Sciences): represents the Faculty in the University and has responsibility for the Faculty's external institutional relations, fiscal policy, new policy and recruitment. The Vice-President reports to the President of the University.

Dean, Health Sciences: has the primary responsibility for the internal academic administration and resource allocation of the Faculty and reports to the Vice-President (Health Sciences) and the Vice-President (Academic).

Associate Deans: Four Associate Deans have responsibility for Education, Research, Health Services and Nursing and are directly responsible to the Dean and Faculty Council.

Chairmen: Each of the programs within Education, Research and Health Services has its own chairman who reports directly to the appropriate Associate Dean. The chairman of the Graduate Program also reports to the Dean of Graduate Studies. The chairmen of Nursing programs in education, research or health services report to both the Associate Dean for the program area and the Associate Dean (Nursing).

The chairmen of the education and research programs are chosen by the Faculty, while the chairmen of the health services programs are selected by the District Health Council in consultation with the University.

Departmental Chairmen and the Director of the School of Nursing, who is also the Associate Dean (Nursing), devote a large part of their time to administrative duties. They act as career development officers for their members and as resource managers who ensure that their members collectively maintain an appropriate balance of activities to meet the needs of the Faculty for teaching, research and health services.

Faculty Council: The Council of the Faculty of Health Sciences is the governing body for the Faculty. It is chaired by the Dean and composed of the Vice-President, Associate Deans, Departmental Chairmen, elected representatives of full-time and part-time faculty, student representatives, and several *ex officio* and invited members. All policies are established and reviewed by Faculty Council before presentation to the University Senate.

Faculty Executive: The executive committee of Faculty Council is Faculty Executive. Chaired by the Dean, it is composed of the Associate Deans, Departmental Chairmen, Executive Director of Chedoke-McMaster Hospitals, and three elected members of Faculty Council. The Chairman,

Graduate Programs (Health Sciences) and the Head, Division of Occupational Therapy and Physiotherapy are invited but non-voting members. The role of this executive committee is to advise the Dean, attend to matters recommended to it by Faculty Council, and, in consultation with members of the three program areas, develop the policies and objectives of the Faculty for approval by Faculty Council, to which it reports and is accountable.

Departments: A faculty member is appointed to one of thirteen departments or to the School of Nursing. Some members have cross appointments.

Programmatic Areas: Programs in Education, Research and Health Services cut across the traditional departmental/school structure and reflect the broad, interdisciplinary scope of health care, education and research. Faculty members must make a major contribution to education and at least one other area — research, health services, or administration.

DEPARTMENTS

- Anatomy
- Anesthesia
- Biochemistry
- Clinical Epidemiology and Biostatistics
- Family Medicine
- Medicine
- Neurosciences
- Obstetrics and Gynecology
- Pediatrics
- Pathology
- Psychiatry
- Radiology
- Surgery

SCHOOL OF NURSING

PROGRAMMATIC AREAS

- Education
- Research
- Health Services

THE "McMASTER APPROACH"

The creation of a new undergraduate medical program together with its closely associated professional programs in nursing, occupational therapy and physiotherapy provided the University with an opportunity to develop a new philosophy toward health sciences education. Community-oriented, people-centred, interdisciplinary and problem-based, this approach has become the hallmark of the Faculty of Health Sciences.

The "McMaster approach" is founded on the belief that the study of "health" encompasses not only the problems of illness but the impact of biological processes, environment and lifestyle on the community and society. To keep pace with the continually expanding knowledge base, students must become lifelong, self-motivated learners.

Admission policies allow students with diverse academic backgrounds to enter Health Sciences. Learning takes place in small group tutorials and is problem-based and self-directed. Progress is monitored by continuous personal and group evaluation.

Students are exposed very early to patients and their problems, in settings ranging from community health care practices to specialized hospital services. Professional teamwork is emphasized. Clinical faculty with strong academic backgrounds in such disciplines as physiology, pharmacology, biochemistry and behavioural sciences, and scientists working within these disciplines, serve as key resource people for students and other faculty members. Students are expected to view health problems from the population, as well as individual, perspective.

The clinical components of the education programs utilize the teaching hospitals and their ambulatory facilities, as well as individual practices and community health agencies, including community health centres and public health units.

The Faculty is structured to meet the needs of interdisciplinary programs as well as traditional departments and disciplines. Education is the responsibility of the whole faculty, and each member is expected to contribute to one or more programs.

Each fall a Faculty Orientation program takes place for new faculty members. Faculty Training Workshops provide opportunities to explore the education programs and the particular roles of the faculty as tutors, resource persons or program planners. Other opportunities for faculty development exist as well. Departmental chairmen assist new faculty members to make the most appropriate allotment of their time.

THE NETWORK

The Faculty has arrangements with a network of hospitals, health care organizations and health professionals in the community and region which permit collaborative efforts in the areas of education, research and health services.

THE HOSPITALS

Collaborative arrangements between the University and the Hamilton hospitals permit education and health research to take place in the hospitals under joint hospital/university supervision. In accordance with the plan for regionalization of health care in

ORGANIZATIONAL RELATIONSHIPS IN HEALTH SCIENCES

MEMBERSHIP OF FACULTY COUNCIL:*

CHAIRMAN:
Dean, Health Sciences

EX OFFICIO:
President
Vice-President (Academic)
Vice-President (Health Sciences)
Dean (Graduate Studies, or Delegate
Associate Deans (Health Sciences)
Departmental Chairmen
Health Sciences Librarian
Chief Executive Officers, affiliated acute-care hospitals

FACULTY:
Representatives of full-time and part-time faculty

STUDENTS:
Representatives of MD, BScN, Graduate and Postgraduate programs

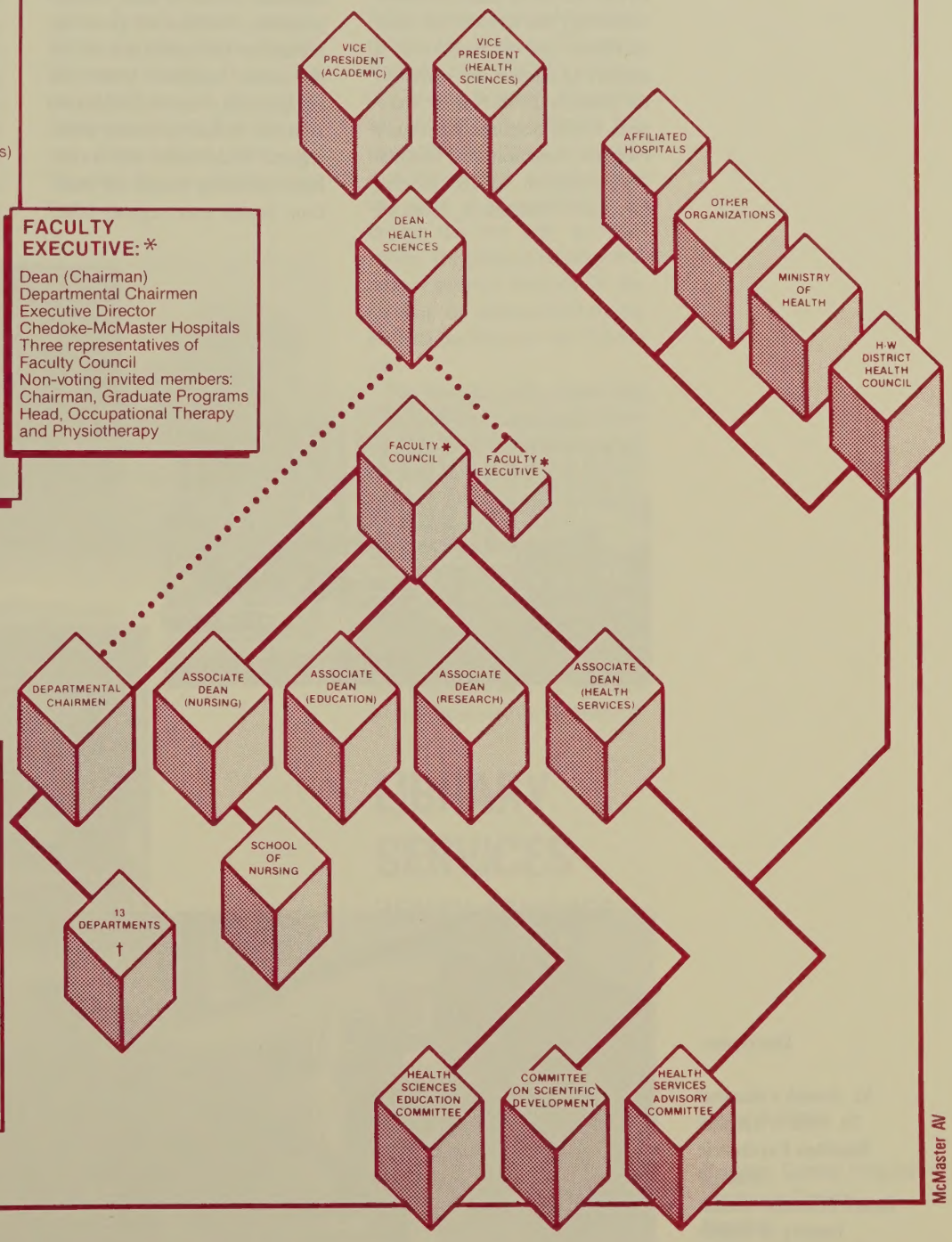
SECRETARY:
Secretary of Senate, or delegate (non-voting)

FACULTY EXECUTIVE:*

Dean (Chairman)
Departmental Chairmen
Executive Director
Chedoke-McMaster Hospitals
Three representatives of Faculty Council
Non-voting invited members:
Chairman, Graduate Programs
Head, Occupational Therapy and Physiotherapy

FACULTY DEPARMENTS †

Anatomy
Anesthesia
Biochemistry (also a Department of the Faculty of Science)
Clinical Epidemiology and Biostatistics
Family Medicine
Medicine
Neurosciences
Obstetrics and Gynecology
Pathology
Pediatrics
Psychiatry
Radiology
Surgery



McMaster AV

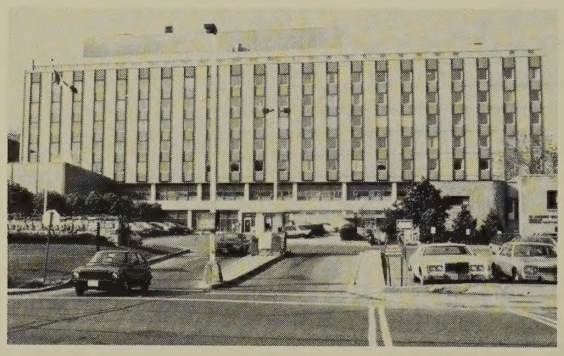
Ontario, decisions about health services are made conjointly among the hospitals guided by a District Health Council. Services are shared and, where appropriate, regionalized and rationalized to avoid duplication.

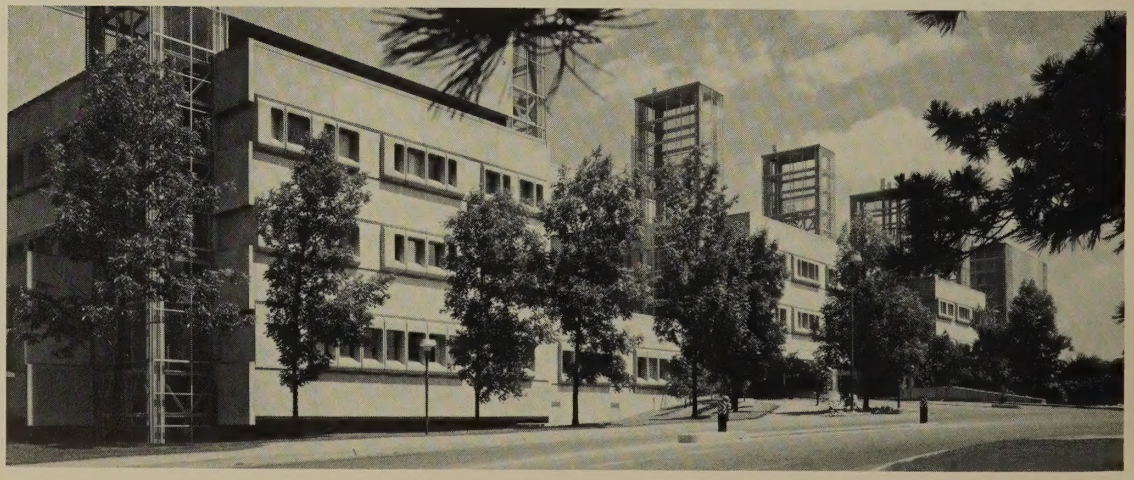
Each Hamilton hospital has specialized in specific clinical activities to avoid duplication of technology and services and make maximum use of resources. A number of services are shared by the institutions, such as the Hamilton Health Sciences Laboratory Program, Hamilton Area Hospital Transportation Service, District Pharmacy Committee, Mohawk Laundry Services, and the Health Library Network.

THE COMMUNITY BASE

Many other institutions, agencies and individuals in the community also provide support for the educational, research and clinical programs. Students are given opportunities for clinical practice by physicians, hospitals, homes for the aged and disabled, health care agencies, industrial health units, regional health units and correctional institutes within the Hamilton health care region, other parts of Canada, and other countries.

Many specialized clinical programs operate simultaneously from institutions in several northwestern Ontario communities. The Northwestern Ontario Medical Program (NOMP) provides opportunities for clinical experience to undergraduate and postgraduate medical students. Hospital-based postgraduate experience is limited to those institutions that have been accredited by both the Royal College of Physicians and Surgeons of Ontario and the College of Family Physicians of Canada.





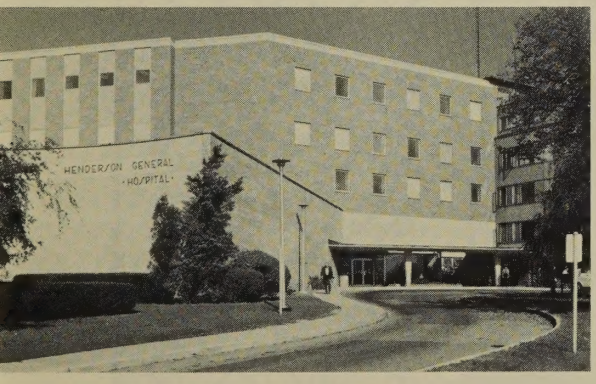
Clockwise:

St. Joseph's Hospital
St. Peter's Hospital
Hamilton Psychiatric Hospital
Health Sciences Centre: Faculty of Health Sciences and MUMC Division of Chedoke-McMaster Hospitals.

NETWORK COORDINATION

The Hamilton-Wentworth District Health Council works jointly with the health care and teaching institutions and the community health care agencies to plan, coordinate and review the health care programs of the region. The Health Council is one of the oldest of more than twenty-four such regional councils established by the Ontario Ministry of Health to plan for health care. The executive and operating authority are vested in the health care and teaching institutions, while the Health Council acts in an advisory capacity to the Ministry of Health.

The health care programs service not only Hamilton-Wentworth but a larger McMaster Health Region which includes part of Central West and Northwestern Ontario. The Faculty of Health Sciences has ties with eight other district health councils within this area: Brant, Niagara, Haldimand-Norfolk, Halton, Waterloo Region and Wellington-Dufferin in Central West Ontario, and Kenora-Rainy River and Thunder Bay in Northwestern Ontario.



THE HEALTH SCIENCES CENTRE

The Health Sciences Centre, built on campus by the University and opened in 1972, houses two independent entities: the McMaster University Medical Centre (MUMC) Division of Chedoke-McMaster Hospitals, and the Faculty of Health Sciences and its related activities. Each has its own administration and areas of responsibility, although the two may act conjointly. The physical facilities and related support services for the building are administered by the hospital on behalf of the University.

The hospital, with more than 400 beds and large ambulatory care facilities, occupies about 60 percent of the building; the remaining 40 percent is devoted to the Faculty of Health Sciences' administrative, educational and research activities and to the Health Sciences Library.

The building also holds a number of ancillary services for staff and patients which are operated by the University or the hospital.

LIBRARY SERVICES

HEALTH SCIENCES LIBRARY

The Health Sciences Library supports all research programs of the Faculty and provides many of the resources needed for the non-traditional methods of teaching and learning. It is also the library for the McMaster Division of Chedoke-McMaster Hospitals. Located in the Health Sciences Centre, the Library seats more than five hundred people and has a large collection of books, jour-

Top to bottom:

Hamilton General Hospital
Henderson General Hospital
Chedoke Division of Chedoke-McMaster Hospitals

nals, audio visual material and computer software, as well as an archival collection and a growing collection on the history of the health sciences.

The Health Sciences Librarian is responsible to the Vice-President (Health Sciences) and is a member of the Health Sciences Learning Resources Committee. The Library Users' Committee, which represents faculty, students and staff, decides on policy and gives direction and support to the Librarian.

The Health Sciences Library is open to members of the public and all health professionals in the district. The Library also acts as a resource for the Northwestern Ontario Medical Program (NOMP)

LEARNING RESOURCES: The Learning Resources area of the library houses equipment to enable the use of audiovisual and computer software. There is a large collection of slide/tape shows, videotapes and problem boxes and a growing amount of computer software. Several professional librarians and a large full-time support staff provide a wide range of services to faculty, students and staff. Library staff work with faculty, staff and students to conduct specialized literature searches and also participate as co-tutors in such non-traditional library areas of study as "critical appraisal of the literature."

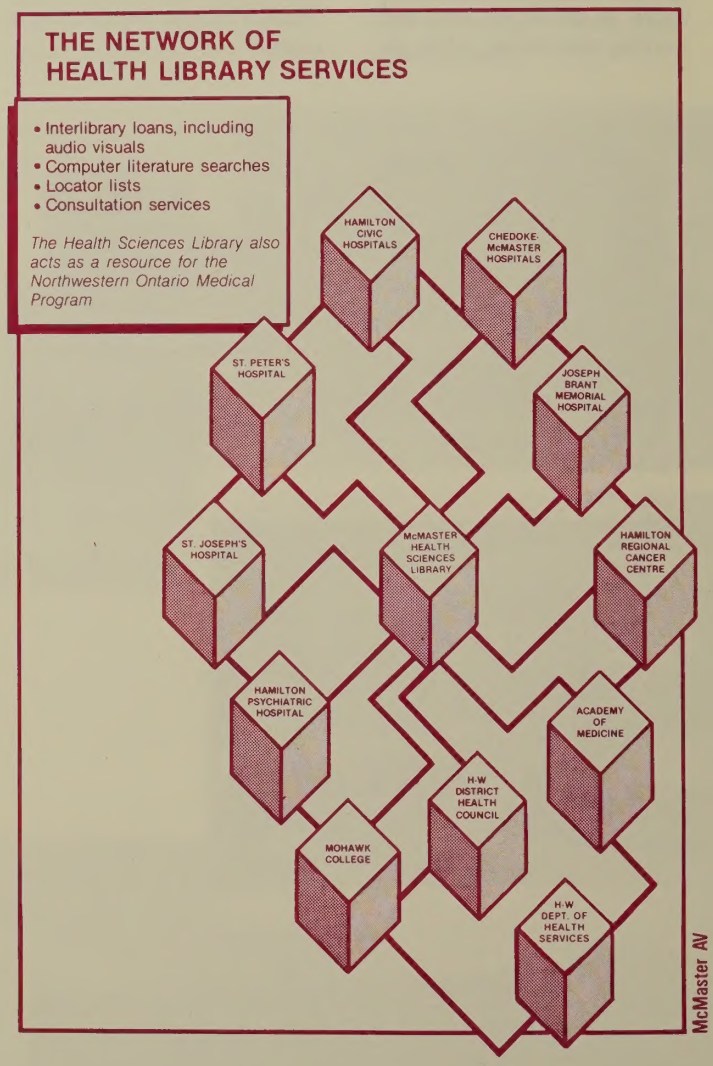
TECHNOLOGICAL INNOVATIONS: The library is planning for major technological innovations which will permit easier and broader access to information, assist with the cataloguing and tracking of holdings, and provide course-related audio visual and microcomputer based materials. Many of these innovations have already been implemented.

DEPARTMENTAL REPRESENTATIVES: Departmental library representatives assist the librarians in building and improving the collection by forwarding suggestions from faculty.

FACULTY ORIENTATION ROOM: The Health Sciences Library has an Orientation Room for faculty and visitors who wish to know more about the Faculty of Health Sciences. The room holds resource material on the Faculty's history, philosophy, educational methods, organization and policies.

HEALTH LIBRARY NETWORK

The Health Sciences Library and the libraries of the regional hospitals and several other community health care agencies and organizations are linked in a Hamilton-Wentworth District Health Library Network. The Network librarian at the Health Sciences Library coordinates a variety of library services for network members.


THE NETWORK OF HEALTH LIBRARY SERVICES
• Interlibrary loans, including audio visuals
• Computer literature searches
• Locator lists
• Consultation services
The Health Sciences Library also acts as a resource for the Northwestern Ontario Medical Program
HAMILTON CIVIC HOSPITALS
CHEDOKE-McMASTER HOSPITALS
ST. PETER'S HOSPITAL
JOSEPH BRANT MEMORIAL HOSPITAL
ST. JOSEPH'S HOSPITAL
McMASTER HEALTH SCIENCES LIBRARY
HAMILTON REGIONAL CANCER CENTRE
HAMILTON PSYCHIATRIC HOSPITAL
ACADEMY OF MEDICINE
H-W DISTRICT HEALTH COUNCIL
MOHAWK COLLEGE
H-W DEPT. OF HEALTH SERVICES
McMaster AV

ADDITIONAL SUPPORT SERVICES

AUDIO VISUAL SERVICES

McMaster Audio Visual Services provides assistance to the University, Chedoke-McMaster Hospitals and other affiliated institutions in the preparation of resources for the education, research and health services programs. A staff of professionals provides a broad range of services: graphic art, including graphs, charts, design and illustration for slides, educational materials, brochures, posters and displays; photography and film processing; television production, editing and dubbing; projection services; audio visual systems design and maintenance; teleconferencing; consultation and program design; and standardization and purchase of audio visual equipment.

COMPUTATION SERVICES UNIT

The Computation Services Unit (CSU) is equipped with four mainframe computers and a growing number of microcomputers. It provides assistance with computer programming, data handling and analysis and word processing to meet the needs of the Faculty. The CSU provides instruction in the use of computers and computer software.

LEARNING RESOURCES

The Health Sciences Learning Resources Committee coordinates the policies and activities of the resource areas as they relate to education. The interests of the morphology modules of the Anatomy Department, the Simulated Patient Program, the Library, Computation Services and Audio Visual Services are represented, as are the different health sciences disciplines of medicine, nursing, physiotherapy and occupational therapy. Representatives from the Program for Educational Development, Chedoke-McMaster Hospitals and Mohawk College also sit on the committee. The committee has liaison with the Faculty's Committee on Scientific Development, the Hamilton hospitals, and other associated institutions.

The Learning Resources Office assists faculty with resource development in cooperation with Audio Visual Services and other production units. It ensures that copies of resources, scripts and cataloguing information are available to the Health Sciences Library, which is responsible for their storage and distribution; advises on resource development; previews and acquires learning resources from external sources; and operates the Health Sciences Learning Resources Sales and Rental Program which makes McMaster materials available to other institutions.

PUBLIC RELATIONS

The Community and Public Relations Office (CPRO) provides help to faculty, staff and students in publicizing appointments, honours, activities and programs, coordinates publicity for special events, and assists the Faculty in working with the media and the community. The CPRO maintains extensive mailing lists and a storage and retrieval system for photos, news clippings and general information about the health care network. These are available for Faculty use.

The CPRO works with the affiliated institutions through the Hamilton Health Sciences public Relations Group, and with the University's Offices of Public Information, Development, Alumni and Student Affairs.

CONFERENCE OFFICE

Located in the Health Sciences Centre, the Conference Office provides assistance with planning for conferences, room bookings and furniture as well as storage and portering services. The Conference Office arranges tours of the Health Sciences Centre and provides training for the guides.

McMaster AV

Teleconferencing permits health professionals to confer with colleagues in far distant centres with the immediacy of a face-to-face meeting.

EDUCATION

The Faculty of Health Sciences provides a wide variety of educational programs which address a broad range of interests. These include undergraduate, postgraduate and graduate programs and programs which deal specifically with educational research, faculty development and the development of learning resources for the education programs. Several continuing health sciences programs of an inter-professional nature are offered by the Faculty to students, faculty and other health professionals. An increasing number of individuals are enrolling as "occasional" students who monitor or observe courses (0% in 1981; 8% in 1984).

The planning, consultation, resource management and resource development for these programs is coordinated by the Health Sciences Education Committee, under the chairmanship of the Associate Dean (Education). Each program is directed by a program chairman appointed by the Council of the Faculty of Health Sciences on the recommendation of the Health Sciences Education Committee, and each has its own education committee chaired by the program chairman.

The Faculty also collaborates with health professionals, universities and government in a number of community-based programs, participates in cooperative interfaculty programs within the University, and takes part in collaborative programs with Mohawk College of Applied Arts and Technology.

Undergraduate Programs

UNDERGRADUATE MEDICINE	The program in Undergraduate Medicine offers a course leading to the MD degree. The academic program operates year-round, making it possible for the student to qualify for the medical degree in three academic years.
NURSING	The four-year Nursing program offers a course of study leading to a Bachelor of Science in Nursing degree. Graduates are eligible to write nurse registration examinations of the Canadian Nurses' Association Testing Service. The program also includes a two-calendar-year stream for RN diploma nurses.
OCCUPATIONAL THERAPY AND PHYSIOTHERAPY	The Bachelor of Health Sciences program is available to diploma graduates of the Mohawk College programs in Occupational Therapy or Physiotherapy and to diploma graduates in Occupational Therapy and Physiotherapy from other institutions.

Special subject areas/disciplines: Because the undergraduate programs are not the prime responsibility of academic departments, another mechanism is necessary to deal with specific biological, sociological or behavioural questions relevant to these disciplines. A faculty member for each discipline is responsible for ensuring that health care problems include issues in these fields, and that students are provided with references or resource people. In the MD program the educational contribution of these areas is integrated by a Discipline Coordinator. The Learning Resources Committee coordinates development and distribution of learning resources, and administrative, financial and logistical support is provided by Education Services.

Postgraduate Programs

INTERNSHIP AND RESIDENCY PROGRAMS	These programs are offered in numerous specialties and subspecialties approved by the Royal College of Physicians and Surgeons and the College of Family Physicians of Canada. Residents receive training in hospitals in Hamilton and adjacent communities and in Northwestern Ontario.

Graduate Programs

MEDICAL SCIENCES AND BIOCHEMISTRY	Graduate programs at the MSc and PhD levels have been established in Biochemistry and in Medical Sciences, where areas of interest include blood and the cardiovascular system, growth and development, neurosciences, and design, measurement and evaluation.
MASTER OF HEALTH SCIENCES	This graduate program leading to a Master of Health Sciences in Health Care Practice (MHSc) prepares experienced health practitioners for positions as clinical specialists.

Continuing Education Programs

CLINICAL BEHAVIOURAL SCIENCES	These diploma courses, which attract post baccalaureate students from a variety of professional backgrounds, are designed to increase knowledge and skills in clinical assessment, management and community intervention.
CONTINUING MEDICAL AND NURSING EDUCATION	These courses, organized with the assistance and cooperation of a number of health associations and agencies, offer a series of refresher events including workshops, conferences and teleconferencing.
ACADEMIC STUDIES	This optional educational program has postgraduate students as its prime constituency, but serves all programs, permitting issues common to a number of health care professions to be explored in an interdisciplinary setting.
OCCUPATIONAL HEALTH AND SAFETY	This diploma program is offered to physicians, nurses, industrial hygienists and related professionals.

Educational Outreach Programs

NOMP	The Northwestern Ontario Medical Program (NOMP), operated for the five medical schools in Ontario and coordinated through the Council of Ontario Faculties of Medicine, provides undergraduate and postgraduate medical students with a variety of unique educational experiences in urban, rural and remote areas. Sponsored by the Ontario Ministry of Health and McMaster University and developed in collaboration with the Thunder Bay and Northwestern Ontario Medical Societies, NOMP is administered through a Thunder Bay office with support from McMaster.
PRIMARY CARE (PC6)	Sponsored by the Ministry of Health, this program provides students from the five Ontario health sciences faculties with clinical experience in community-based primary care settings.

	PERINATAL OUTREACH	A cooperative undertaking of Chedoke-McMaster Hospitals and the Faculty of Health Sciences, this program offers administrative and educational consultation to the more than twenty hospitals participating in the Regional Perinatal Program.
	INTERNATIONAL HEALTH	McMaster participates in a number of externally-funded exchange programs which bring health professionals from abroad to McMaster and send McMaster faculty and students abroad.
Cooperative Programs	**COOPERATIVE PROGRAMS**	**History of Medicine, Medical Ethics:** The Faculty of Health Sciences and the Faculty of Humanities together offer teaching programs in the History of Medicine which are coordinated by the Jason A. Hannah Professor of the History of Medicine. Aspects of medical history are presented as open lectures, elective programs for medical and nursing students, seminars for residents and faculty, and undergraduate and graduate studies for history students. A broad-ranging and growing historical collection is housed in the Health Sciences Library. These two Faculties also offer interdisciplinary courses in medical ethics. **Other Interfaculty Programs:** Interdisciplinary graduate programs are offered by the Faculty of Business (Health Care Administration); the Faculty of Engineering (Biomedical Engineering); the School of Physical Education in the Faculty of Social Sciences (Adapted Human Dynamics); and the Faculty of Science (courses in Virology).
Educational Research and Development	**PROGRAM FOR EDUCATIONAL DEVELOPMENT**	PED is an educational research and development program whose main areas of research focus on measures of student performance, clinical reasoning, health sciences informatics, and the followup and comparative assessment of McMaster graduates. Fellowships are available from time to time.
	FACULTY DEVELOPMENT	A number of opportunities exist to acquaint new faculty members with the various programs and the roles which they, as faculty, can fill. Among these are special orientation sessions, faculty development workshops, visitors' workshops, a program to prepare faculty for leadership roles in education, and other interprogram educational opportunities.
	LEARNING RESOURCES	The policies and procedures for development and use of all types of learning resources are coordinated by the Health Sciences Learning Resources Committee. These fall into four broad categories: reference, evaluation and information resources, and biomedical/health care problems.

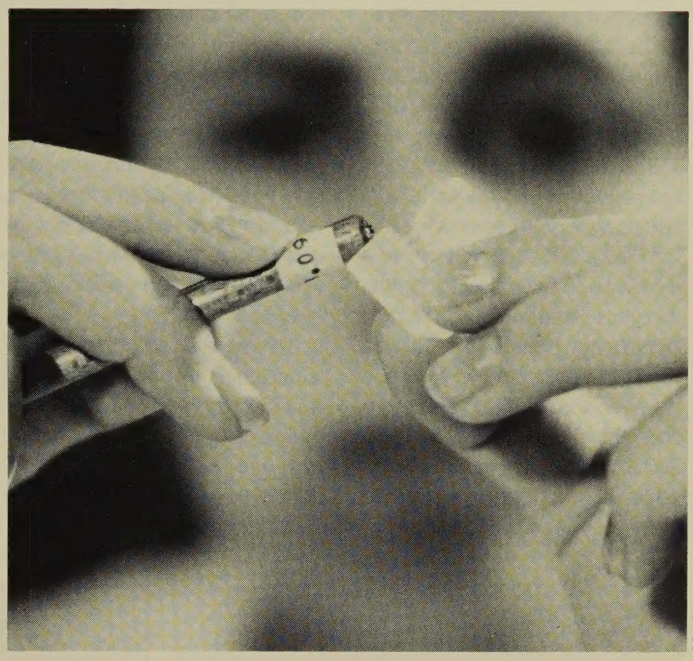
MOHAWK LIAISON PROGRAMS

Mohawk College of Applied Arts and Technology and McMaster's Faculty of Health Sciences have developed a number of collaborative programs which permit the two institutions to benefit from each other's resources.

Mohawk Liaison Programs

RESEARCH

The educational and clinical programs have been integrated with research, and it is this close interaction which gives the academic programs their strength. The Faculty has strong programs in basic research, in applied research where the value of new knowledge is tested, and in health care research to explore efficient and effective ways of delivering new knowledge in health care.



McMaster AV

COMMITTEE ON SCIENTIFIC DEVELOPMENT

The Associate Dean (Research) together with the Committee on Scientific Development (CSD) is responsible for recommending research policies to the Faculty and assisting in their implementation, particularly with respect to resource management. A number of central research facilities have been established under the management of the CSD.

METHODOLOGY

Two services with both educational and research components are offered by the Department of Clinical Epidemiology and Biostatistics. The **Intra-faculty Service Program** and the **Regional Service Program** for health research provide expert consultation in research methodology and assistance in the development of methods to study the effectiveness and efficiency of existing or proposed community health programs. The Intra-faculty Service Program is available to any McMaster faculty member. The Regional Service Program will assist any health agency, individual, health professional or administrator within the McMaster Health Care Region.

MAJOR PROGRAMS

Major research programs have been established in the following areas:

- **Brain and Behaviour**
- **Cardiovascular Disease, Hemostasis and Thromboembolism**
- **Control of Smooth Muscle Function**
- **Program for Educational Development**
- **Molecular Virology and Immunology (formerly Host Resistance)**
- **Reproductive Biology**

CLINICAL RESEARCH

The combined strength of the clinical departments and the Department of Clinical Epidemiology and Biostatistics has made the Faculty one of the leading centres for clinical research.

OTHER AREAS OF STRENGTH

The Faculty also has considerable strength in several other areas:

- **Clinical Epidemiology and Biostatistics**
- **Gastrointestinal Disease**
- **Gerontology**
- **Molecular Genetics**
- **Nuclear Medicine**
- **Occupational Health and Safety**
- **Primary Care Research**
- **Respirology**

The academic programs are strengthened by the integration of research with education and health services.

HEALTH SERVICES

Through continuous study, planning, cooperation and agreement, the health care organizations in Hamilton have developed an integrated network of health services. By setting common goals and objectives these organizations - McMaster University, Mohawk College, the affiliated teaching hospitals (Chedoke-McMaster Hospitals with divisions McMaster University Medical Centre and Chedoke Hospital; the Hamilton Civic Hospitals with divisions Hamilton General and Henderson General; Hamilton Psychiatric Hospital; St. Joseph's Hospital; and St. Peter's Hospital) and the Hamilton-Wentworth District Health Council - have achieved much in the way of resource sharing and the rationalization and regionalization of health services.

Hospitals are designated for specific programs to make maximum use of resources and avoid duplication of services. Clinical services in many locations in the community provide primary and secondary level care and support for comprehensive health care programs in the affiliated teaching hospitals; many of these programs are available to the entire McMaster Health Region. Cooperation and coordination have also been achieved in other areas of endeavour, such as the Hamilton-Wentworth Health Library Network and Biomedical Engineering.

The emphasis on teamwork and community involvement has led to integration and coordination of university and community health care programs under the direction of the Associate Dean (Health Services). Clinical faculty appointments must be jointly approved by the University and the appropriate teaching hospital or health care agency. Such appointments thus carry with them a dual accountability to the health services sector and the university. Faculty and students are involved in community-based health care as well as the more traditional hospital-based secondary and specialized tertiary care.

The health services programs fall into two categories: multi-institutional activities related to primary clinical disciplines and their subspecialties ("vertical" programs); and multi-institutional, multidisciplinary activities related to single diseases or categorical groups of diseases ("horizontal" programs).

Other areas are also developing, and these include Oncology, Perinatology, Respirology, Rheumatology and Thromboembolism Services.

"VERTICAL" PROGRAMS

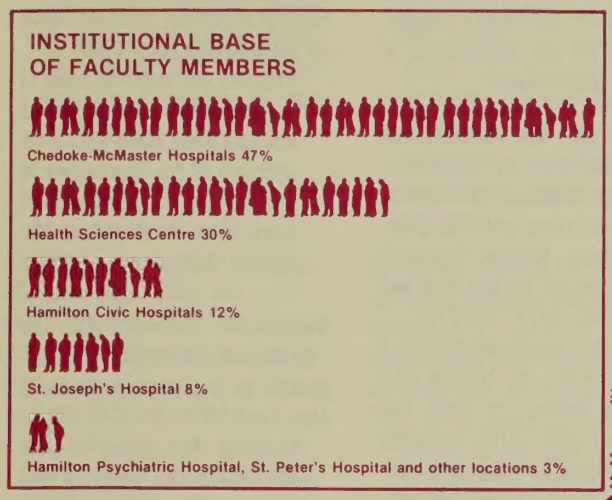
Each major clinical discipline is organized to permit the head of the University clinical department to also function as the coordinator of the discipline for the Hamilton-Wentworth Health Region.

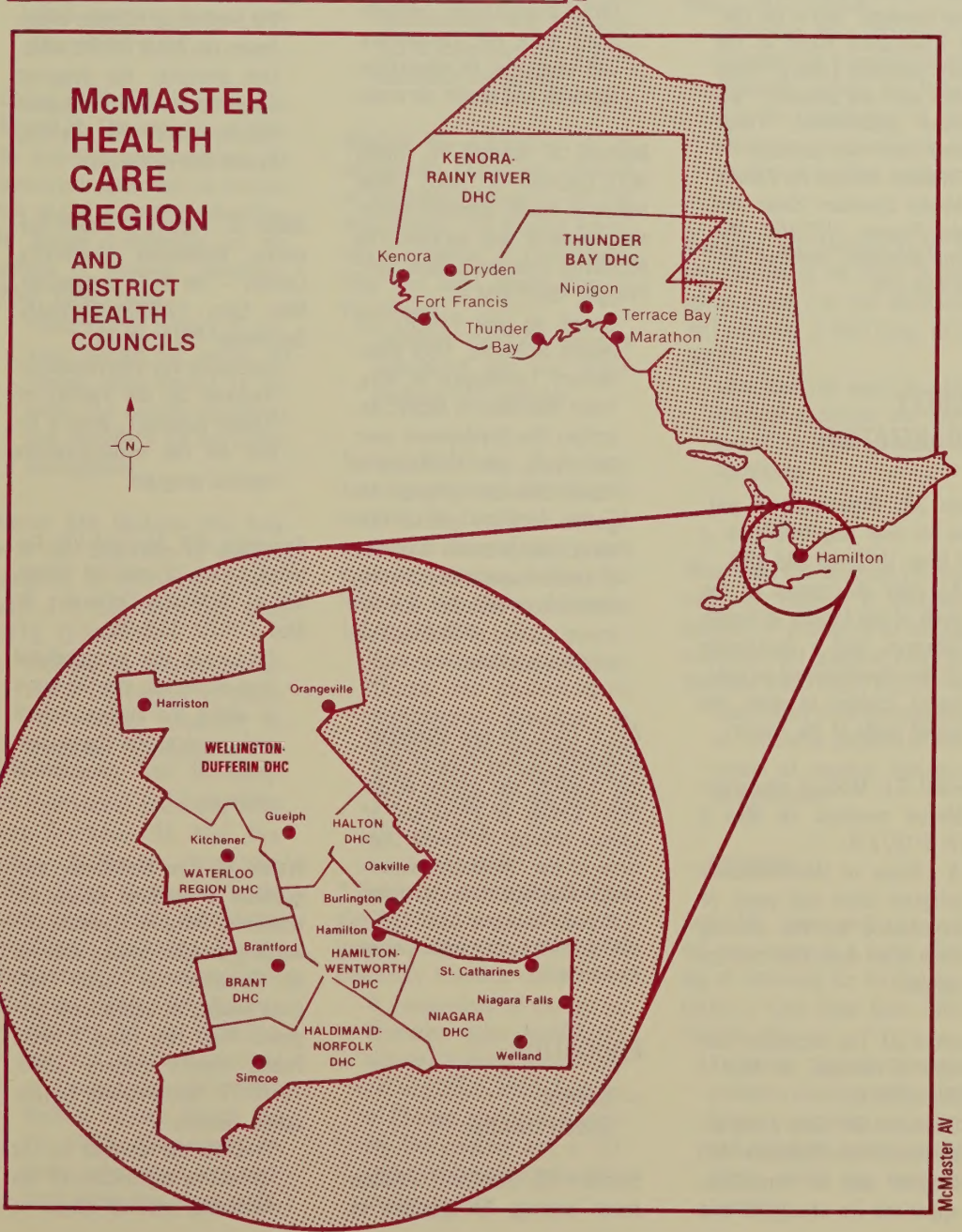
- **Anesthesia**
- **Family Medicine**
- **Internal Medicine and Medical Subspecialties**
- **Obstetrics and Gynecology**
- **Pathology**
- **Pediatrics**
- **Psychiatry**
- **Radiology**
- **General Surgery and Surgical Subspecialties**

"HORIZONTAL" PROGRAMS

Where health services involve multiple disciplines and/or institutions, formal arrangements between primary specialties, including the appointment of a coordinator, have been undertaken to ensure the optimal use of resources.

- **Cardiology and Cardiovascular Disease**
- **Emergency Medical Services**
- **Geriatrics and Gerontology**
- **Laboratory Medicine (Hamilton Health Sciences Laboratory Program)**
- **Palliative Care**
- **Trauma**


INSTITUTIONAL BASE
OF FACULTY MEMBERS
Chedoke-McMaster Hospitals 47%
Health Sciences Centre 30%
Hamilton Civic Hospitals 12%
St. Joseph's Hospital 8%
Hamilton Psychiatric Hospital, St. Peter's Hospital and other locations 3%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Harriston
Orangeville
WELLINGTON-
DUFFERIN DHC
Guelph
HALTON
DHC
Kitchener
Oakville
WATERLOO
REGION DHC
Burlington
Hamilton
Brantford
HAMILTON-
WENTWORTH
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St. Catharines
BRANT
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Niagara Falls
NIAGARA
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HALDIMAND-
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SELECTED READINGS

*The following readings provide further information and a historical perspective on McMaster's Faculty of Health Sciences. Copies are lodged in the Reserve Collection of the Health Sciences Library in a binder entitled "Health Sciences Briefs — Selected Readings" and in the Faculty Orientation Room in the Health Sciences Library. Items marked with one asterisk * are in-house publications. Those marked with two asterisks ** are available through the Faculty of Health Sciences' Sales and Rental Program, HSC-1G6, McMaster University, Hamilton, Ontario L8N 3Z5.*

FACULTY ORGANIZATION:

Evans JR. Organizational patterns for new responsibilities. J Med Educ 1970; 45:988-999.

An early description of the goals of the Faculty of Health Sciences, and a description of the organizational arrangements created to meet the varied goals of the Faculty.

Fraenkel GJ. Medical education: McMaster revisited. Br Med J 1978; 2:1072-6.

A critique of the McMaster program after ten years of experience by the visiting dean of an Australian medical school.

Hamilton JD. The McMaster curriculum: a critique. Br Med J 1976; 1:1191-6.

Describes the history and objectives of the McMaster MD program and its curriculum, appraises its strengths and problems, and offers suggestions for its application in other universities.

Mustard JF. The Faculty of Health Sciences at McMaster University, Canada. IN: Health, Higher Education and the Community. Paris, France: Organization for Economic Co-operation and Development, 1977; 199-210.

Describes the development of the Faculty of Health Sciences during its first ten years (1965-1975), including its policies and objectives, internal organization, relationships with the community, and programs in education, research and health services.

Mustard JF, Neufeld VR, Walsh WJ, Cochran J, (eds). New trends in health sciences education, research and service: The McMaster experience. New York: Praeger, 1982; 204 p.

Based on the Faculty of Health Sciences' 10th Anniversary Conference in May, 1980, this book of essays describes the development over 14 years of McMaster's Health Sciences program together with its special features, and presents analyses of similar experiences in other institutions. Included are followup studies of McMaster's medical graduates.

NB. In 1972, the year McMaster graduated its first class of medical students, the Journal of the Royal College of Physicians of London devoted its entire July issue to the "McMaster experiment." Readings from this issue (J R Coll Physicians Lond 1972; 6(4)) provide further historical information.

EDUCATION

— CROSS-DISCIPLINARY:

Barrows HS, Tamblyn R. Problem based learning: An approach to medical education. Springer Series on Medical Education 1980; 1.

Presents the scientific basis of problem-based learning in medical education along with a description of the approaches to problem-based learning that have been developed at McMaster University.

Neufeld VR, Barrows HS. The "McMaster philosophy": an approach to medical education. J Med Educ 1974; 49:1040-50.

Outlines the goals of the McMaster MD program and the central set of ideas which forms the basis for the selection process, the program components, the evaluation system, and the learning events and resources.

Sibley JC. Faculty of Health Sciences, McMaster University, Canada — the 1977 perspective. Med Educ 12(5)(Supplement), September 1978; 15-18.

Discusses key innovations introduced by the Faculty of Health Sciences, with a focus on the undergraduate medical program.

Spaulding WB, Neufeld VR. Regionalization of medical education at McMaster University. Br Med J 1973; 3:95-98.

Discusses the geographical area of Ontario and the ways in which the medical school and services fit these geographical and geopolitical patterns.

Walsh, W. The McMaster programme of medical education, Hamilton, Ontario, Canada: Developing problem-solving abilities. IN: Personnel for health care: Case studies of educational programs. Katz FM, Fulop T (eds). Public Health Papers 1978; 70:70-77. World Health Organization, Geneva.

Presents the rationale for the innovative approaches of the McMaster medical school to

admissions, tutorials, problem-based, self-directed learning, primary care, and examines the structure of the curriculum.

– MEDICINE:

Ali MAM, Thomas EJ, Hamilton JD, Brain MC. "Blood and guts": one component of an integrated program in biological sciences as applied to medicine. Can Med Assoc J 1977; 116:59-62.

Describes one year of the undergraduate program organized along the lines of "organ system units."

Chong JP, Neufeld V, Oates MJ, Secord M. The selection of priority problems and conditions: An innovative approach to curriculum design in medical education. In Annual Conference on Research in Medical Education, 23rd, 1984; 17-25.

Presents the results of surveys carried out within all clinical departments to develop the priority problems and conditions for curriculum development.

Ferrier BM, McAuley RG, Roberts RS. Selection of medical students at McMaster University. J R Coll Physicians Lond 1978; 12:365-78.

Provides an updated description of the system for selecting medical students at McMaster University.

** Institutional Self-Study Analysis: Synthesis '85. M.D. Program, McMaster University, 1985. Other documents in the same series include Admissions; Disciplines; Evaluation; Faculty development; Followup studies on graduates; Problem development.

Prepared for the Accreditation Visit of the Committee on Accreditation of Canadian Medical Schools March 25-29, 1985, this report includes information and comment about the broad goals, activities and resources of the Faculty of Health Sciences, but focuses on the M.D. Program and the means by which the Faculty of Health Sciences fulfills its mandate of educating future physicians.

Leeder SR, Sackett DL. The medical undergraduate programme at McMaster University: Learning epidemiology and biostatistics in an integrated curriculum. Med J Aust 1976; 2:875, 878-80.

Describes the way in which a "discipline" such as Clinical Epidemiology and Biostatistics is integrated into a problem-based curriculum.

Neufeld VR. Adventures of an adolescent: Curriculum changes at McMaster University. IN: The New Biology and Medical Education, C Friedman, EF Purcell (eds). New York 1983, Josiah Macy Jr Foundation.

Describes curricular changes introduced into the undergraduate MD program.

Neufeld VR, Chong JP. Problem-based professional education in medicine. IN: Goodlad S (ed). Education for the professions, quis custodiet? Nelson: Society for Research into Higher Education 1984; 249-256.

Reviews the history and rationale for problem-based professional education in medicine and describes the experience of McMaster's MD program in the use of this approach.

* Postgraduate medical education information package. Postgraduate program, McMaster University. Hamilton 1986.

A compendium of current information about McMaster's program in postgraduate medical education which includes a 10-page pamphlet describing the program and a 113-page program director's information manual.

Sibley JC. Postgraduate (residency) training at McMaster: a strategy for change. Med Educ 1978; 12(suppl):76-81.

Presents the background of developments in postgraduate education in the Faculty of Health Sciences, its postgraduate educational objectives, and the strategies used to implement change.

Spaulding WB, Neufeld VR. Regionalization of medical education at McMaster University. Br Med J 1973; 3:95-8.

Describes how education is arranged on a regional basis. Examples include the library and the contribution of physicians in practice to the education of medical students.

Sweeney GD, Mitchell DLM. An introduction to the study of medicine: Phase I of the McMaster MD program. J Med Educ 1975; 50:70-7.

Describes the ways in which medical students are introduced to their studies at McMaster.

Woodward CA, Neufeld VR, Norman GR, Stillman P. Simulated patients in evaluation of medical education and practice. Ann Conf Res Med Educ 1983; 22:238-44.

Deals with three perspectives on simulated patients in evaluation of medical education and practice.

– NURSING:

Callin ME. Going back to school: An open letter to a nurse thinking of returning for further education. J Cont Educ Nurs 1983; 14(4):21-26.

Examines the psychosocial problems experienced by adult learners returning to school and discusses coping mechanisms which can ease the transition.

Callin M, Ciliska D. Revitalizing problem solving with triple jump. Can Nurse 1983; 79(3):41-44.

Describes and discusses an experiential exercise (Triple Jump) which enables students to observe and evaluate their problem-solving behaviour, while simultaneously verifying their self-assessments with another person (the tutor).

Kergin DJ, Yoshida MA, Spitzer WO, Davis JE, Buzzell EM. Changing nursing practice through education. Can Nurse 1973; 69:28-31.

Reports on McMaster University's program to prepare family practice nurses, and demonstrates how changes in patterns of practice can be made through the educational process.

McKnight J, Rideout E, Brown B, Ciliska D, Patton D, Rankin J, Woodward C. The objective structured clinical examination: An alternative approach to assessing student clinical performance. JNE, forthcoming.

Describes the acceptability of the OSCE to students and tutors, the OSCE's usefulness as a method of assessing clinical skills performance, and faculty time involvement as compared to usual direct observation method of evaluation.

* Report to ORCAUSN Accreditation Committee for Program Approval – McMaster University. School of Nursing, McMaster University. Hamilton, Ontario, September 1985.

Prepared for the Accreditation Visit of the Ontario Region Canadian Association of University Schools of Nursing in September, 1985, this report describes the organizational structure, curriculum, evaluation methods and characteristics of the BScN program.

Spitzer WO, Sackett DL, Sibley JC, Roberts RS, Gent M, Kergin DJ, Hackett BC, Olynich A. The Burlington randomized trial of the nurse practitioner. N Engl J Med 1974; 290:251-56.

Studies the effectiveness of the nurse practitioner – a registered nurse with special training in primary care – in the complementary role of co-practitioner with primary care physicians in a community practice.

von Schilling K. An education process for effective teamwork. Nurs Education Today 1982; 5-7.

Describes a curricular design for professional education which incorporates communication and problem-solving skills, assertiveness, and an understanding of the functional repertoire of various professions to achieve effective inter-professional collaboration in health care practice.

– OCCUPATIONAL THERAPY AND PHYSIOTHERAPY:

Cooper B, Dolyniuk (Tremblay) ML, Westmorland M. The use of problem based learning in occupational therapy. IN: Tutorials in problem based learning: A new direction in teaching in the health professions. Willem S DeGrave, Jos HC Moust, Henk G Schmidt (eds). Rijks Universiteit, Limburg, Maastricht, The Netherlands: Network of Community Oriented Educational Institutions for Health Sciences, 1985; vol 2.

Reviews issues in the design and implementation of a problem-based curriculum in occupational therapy. This program was developed jointly by Mohawk College and McMaster University and used concepts of problem-based learning similar to those of the McMaster MD program.

Dardier E. Mohawk College physiotherapy program. Physiotherapy Canada, 1973; 25(4):237-9.

Describes the development of the problem-based curriculum in the Mohawk College Occupational Therapy Diploma Program.

* Report to the Canadian Physiotherapy Association for Accreditation of the Bachelor of Health Sciences Program. Bachelor of Health Sciences Program, McMaster University. Hamilton, Ontario, August 1986.

Prepared for the Accreditation Visit of the Canadian Physiotherapy Association in August, 1986, this report describes the historical background and current status of the Physiotherapy portion of the Bachelor of Health Sciences program at McMaster University.

** Report of the Task Force on Occupational Therapy and Physiotherapy Research, Faculty of Health Sciences, McMaster University. Prepared in conjunction with the Faculty of Health Sciences of Mohawk College and the Hamilton Clinical Teaching Units. Bachelor of Health Sciences Program, McMaster University. Hamilton, Ontario 1985.

Describes the objectives and current status of collaborative research in occupational therapy and physiotherapy between the university, community college and clinical teaching units in Hamilton.

Williams R, Baker L, Marshall J. Information searching in health care: A workbook for occupational therapists and physiotherapists. Monograph. McMaster University, Hamilton 1986.

Allows the reader to work through the library resources and services which are specifically focused on the information needs of occupational therapists and physical therapists. It also provides infor-

mation on how to critically appraise clinical articles once they have been found.

– GRADUATE EDUCATION:

* Graduate program information package. Health Sciences Graduate Program, McMaster University. Hamilton 1986.

A compendium of information about McMaster's Health Sciences Graduate Program containing a Graduate Calendar; a booklet on the admissions process for the MSc/PhD level Graduate Program in Medical Sciences; a booklet on the MSc program in Design, Measurement and Evaluation; and a brochure on the MHSc program in Health Care Practice.

– CONTINUING EDUCATION:

* Baskin M. 'CBS' creates a regional network for the helping professions. Network January 1986. McMaster University, Hamilton.

Reviews the Clinical Behavioural Sciences post-baccalaureate diploma and selected studies program developed by McMaster's Department of Psychiatry. This unique part-time educational program provides allied health professionals with the opportunity to enhance their knowledge and skills in clinical assessment and management.

* Continuing Medical Education Program Report, 1978-84. Continuing Medical Education Program, March 1985. McMaster University, Hamilton.

A report on the Continuing Medical Education program prepared for the March, 1985 Accreditation Review.

* Cochran J. The Occupational Health Program. Network 1985; 2(5). McMaster University, Hamilton.

Describes the educational, research and health services components of McMaster's Occupational Health Program.

Davis D, Feldman E. The McMaster CME Society. Med Educ 1982; 57:476-80.

Registration for CME events at McMaster University may be achieved by registering for each event or by a prepaid annual fee; this report discusses the objectives of this "CME Society" and the extent to which they have been met.

Davis D, McConvey G, Neufeld VR, Norman CG, Woodward CA. The use of standardized (simulated) patients as a needs determining tool in continuing medical education. In Annual Conference on Research in Medical Education, 24th, 1985, 201-5.

Presents the methodology and results of a study of the standardized patient as a highly relevant and useful CME "package" for needs assessment.

Feldman E, Davis D. Why do physicians attend short courses as a form of continuing medical education? A survey of participants. Cont Med Educ News 1980; 9.

Presents results of a survey of participants in CME short courses.

McFarlane AH, Joyner J, Horn D, Levine LE. The Clinical Behavioural Sciences Program: Post-professional education in mental health. J Med Ed 1980; 55(1): 70-71.

Describes the Clinical Behavioural Sciences program, which was designed to provide those in the allied health professions with the opportunity to enhance their knowledge and skills in clinical assessment and management.

– EDUCATIONAL OUTREACH:

Edwards NC, Tompkins CH. Building a foundation for primary health care: An educational approach. Nurse Educator (forthcoming).

Describes a problem-based innovative educational program developed at McMaster University with funding from the Canadian International Development Agency to strengthen the primary health care skills of nurse tutors and service-providers from the Aga Khan University School of Nursing and Hospital, and the Central Health Board in Pakistan.

* Green S. Reaching out – the "international connection." Network Dec 1984. McMaster University, Hamilton.

A description of the activities of McMaster's International Health Liaison Committee.

Rudnick KV, Fraser WP, Sibley JC, Neufeld VR, Sackett DL, Gerrard BA. The impact of continuing education on the quality of patient care. Can Fam Phys 1983; 29:810-18.

Discusses a project which gave learning packages to physicians and later measured the impact on patient care.

– EDUCATIONAL RESEARCH AND DEVELOPMENT:

** Activities of the Program for Educational Development. Program for Educational Development, McMaster University. Hamilton, Ontario, 1986.

A document prepared for an external review which overviews the Program for Educational Development, one of the groups responsible for educational research and development.

– EVALUATION:

Ferrier BM, Woodward CA. Career choices, work patterns and perception of undergraduate medical education of McMaster University graduates: Comparison between men and women. Can Med Assoc J 1982; 126:1411-1415.

Differences were noted in the replies of men and women regarding their perceptions of their medical education. In further career decisions, women appear to be more influenced by their spouses than men.

Ferrier BM, Woodward CA. Does premedical academic backgound influence medical graduates' perceptions of their medical school or their subsequent career paths and decisions? Med Educ 1983; 17:72-78.

Neither completion of science courses that are usually required for admission to other medical schools nor achievement of high grades in premedical studies has an important impact on graduates' perceptions of their medical curriculum or on their evaluation of their preparation for postgraduate training.

Harper AC, Roy WB, Norman GR, Rand CA, Feightner JW. Methodological difficulties in clinical skills evaluation. Med Educ 1983; 17(1):24-27.

Presents a case-specific method of evaluating clinical skills. The instrument is described together with its evaluation based on results from 92 medical students.

Maudsley RF, Lamont JA. An evaluation form for the assessment of surgical skills of residents. Ann Roy Coll Phys Surg Can 1986; 19(6):457-60.

Discusses the assessment of the surgical skills of trainees through the use of a summary rating form. The evaluation form used in the training program in obstetrics and gynecology at McMaster is used as an example.

McAuley R, Woodward CA. Faculty perceptions of the McMaster MD program. J Med Educ 1984; 59:842-42.

A random sample of faculty was taken to gain their perceptions of the undergraduate MD program.

Neufeld VR. Student assessment in medical education: a Canadian case study. Assessment and Evaluation in Higher Education 1982; 7(3):203-15.

Describes the principles upon which the student evaluation system is based, and provides a summary of how evaluation is conducted. Several problems of this approach are noted, along with a prospectus on future developments.

Painvin C, Norman GR, Neufeld VR, Walker I, Whelan G. The "triple jump" exercise – a structured measure of problem solving and self directed learning. In Annual Conference on Research in Medical Education, 18th, 1979, 73-77.

Describes a study to test the reliability of the "triple-jump" (a structured oral examination used at McMaster University).

Powles ACP, Wintrip N, Neufeld VR, Wakefield JG, Coates G, Burrows J. The "triple-jump" exercise – further studies of an evaluative technique. In Annual Conference on Research in Medical Education, 20th, 1981, 74-79.

A followup to the above study, this paper attempts to further assess the reliability of this evaluation instrument.

Simpson MA. Medical student evaluation in the absence of examinations. Med Educ 1976; 10(1):22-26.

Describes the rationale and methodology of a structured evaluation system based on validated self-assessment and without formal examinations, as developed by the MD program at McMaster University.

Stratford P, Pierce-Fenn H. Modified essay question. Phys Ther 1985; 65:1075-79.

Describes the use of a modified essay question as an evaluation tool for a second-year physiotherapy student population.

Stratford P, Pierce-Fenn H. Predictive validity of the modified essay question. Physiother Can 1985; 37:356-59.

Part of an ongoing project on student evaluation, this paper describes how the modified essay question was used as a tool to predict clinical success in second-year physiotherapy students.

Woodward CA. Measuring learning climate at McMaster: Conceptualization, outcome and challenge. Part of a symposium on medical learning. Ann Conf Res Med Educ 1980; 19:371-79.

Woodward CA. Self-evaluation in medical education at McMaster University. Ann Conf Res Med Educ 1981; 20:237.

Part of a symposium entitled "Self-evaluation in undergraduate and graduate medical education" in which three medical schools describe their experience with student self-evaluation.

Woodward CA, Ferrier BM. Career development of McMaster University medical graduates and its implications for Canadian medical manpower. Can Med Assoc J 1982; 127:477-80.

A study of the career paths and decisions, and the factors influencing the decisions,

of the first six graduating classes of McMaster University's medical school.

Woodward CA, Ferrier BM. Perspectives of graduates two to five years after graduation from a three-year medical school. J Med Educ 1982; 57:294-302.

Presents the information obtained from a survey of McMaster medical graduates regarding their perceptions of curriculum features and length of the McMaster curriculum and relates it to background characteristics of the graduates.

Woodward CA, Ferrier BM. The content of the medical curriculum at McMaster University: Graduates' evaluation of their preparation for postgraduate training. Med Educ 1983; 17:54-60.

Graduates were surveyed to obtain information regarding their perceived preparation for postgraduate work. They were asked to compare their preparation with that of fellow trainees.

Woodward CA, McAuley RG. Can the academic background of medical graduates be detected during internship? Can Med Assoc J 1983; 129:567-69.

Internship supervisors rated the performance of McMaster medical graduates. No difference was observed between performance of students who had the usual academic prerequisites for medical school entry and those who did not have these prerequisites.

– LEARNING RESOURCES:

Barrows HS, Tamblyn RM. The Portable Patient Problem Pack (P4): A problem based learning unit. J Med Educ 1977; 52: 1002-4.

Describes a problem-based learning resource which presents a clinical simulation in card format.

Brain EA, Bidwell CM. How to construct an audiovisual programme. IN: How To Do It, 2nd Ed., 146-72, British Medical Association, London, 1985.

Provides guidelines for producing the elements of an audiovisual program including script, visuals, sound track and printed materials.

Cooper BA. The P-4 Deck (Portable Patient Problem Pack): Educational Tool of the Future? Cdn J Occup Ther 1983; 50:21-24.

Describes the structure and use of the Portable Patient Problem Pack (P-4 Deck) as a clinical simulation and educational tool. Originally designed to present medical diagnostic problems, the P-4 Pack has been adapted by the author for use in occupational therapy.

Dickinson CJ, Goldsmith CH, Sackett DL. MacMan: a digital computer model for teaching some basic principles of hemodynamics. J of Clinical Computing 1973; 2(4):42-50.

Describes one of the computer-based physiologic models – the cardiovascular model.

** Learning Resources: A guide to use and development. Health Sciences Learning Resources Committee, McMaster University. Hamilton, Ontario, 1983/84.

The academic programs at McMaster depend heavily on the use of learning resources. This manual provides information on how resources may most easily be accessed, used or prepared.

** Learning Resources Sales: Rentals Catalogue. Faculty of Health Sciences, McMaster University. Hamilton, Ontario.

A catalogue of the available audio visual learning resources which have been produced at McMaster University.

Neufeld VR, Spaulding WB. Use of learning resources at McMaster University. Br Med J 1973; 3:99-101.

A summary of the ways in which resources such as audio visual aids, print material, problem-based learning resources, and other resources are used in the education programs at McMaster.

Pallie W, Brain E. "Modules" in morphology for self-study: a system for learning in an undergraduate medical programme. Med Educ 1978; 12:107-13.

A paper describing the imaginative contribution of morphologists to the education of medical students.

Robinow BH. Audio visuals and non-print learning resources in a Health Sciences Library. J Biocommun 1979; 6(1):14-19.

A description of the ways in which resources developed by McMaster's Faculty of Health Sciences to accompany its self-directed, problem based approach to learning were incorporated into the McMaster Health Sciences Library.

FACULTY ROLES:

Barrows HS, Tamblyn R, Jenkins M. Preparing faculty for innovative educational roles. J Med Educ 1976; 51:592-94.

Describes workshops for health sciences educators on the role of the tutor in small group, problem-based learning.

** Neufeld V. Faculty resources for education. Health Sciences Education Committee, McMaster University, Hamilton 1986.

Produced by the Health Sciences Education Committee, this report reviews the status of faculty resources for education and outlines a general strategy for their deployment.

* Pedagogue 1984; 12(3). McMaster University, Hamilton.

An entire issue devoted to a discussion of faculty development in health sciences and the activities sponsored by the Faculty Development Committee of the Program for Educational Development in McMaster's Faculty of Health Sciences.

RESEARCH

* Committee on Scientific Development (CSD). Faculty of Health Sciences, McMaster University. Hamilton, Ontario 1984.

A description of the purpose and responsibilities of the CSD, the official Research Committee for the Faculty of Health Sciences.

Gent M, Leeder SR, Sackett DL. Making research relevant. Med J Aust 1977; 2:807-12.

A review of the collaborative medical and health care research carried out by the Department of Clinical Epidemiology and Biostatistics at McMaster between 1970 and 1976.

Mustard JF. Health research and graduate education. J R Coll Physicians Lond 1972; 6:373-79.

A description of the research policies and objectives established by the Faculty of Health Sciences, the mechanisms for research administration, coordination and funding, and the development of graduate programs which carry out its research objectives.

Bienenstock J. Host resistance between friends. J R Coll Physicians Lond 1972; 6:407-11.

Describes an interdisciplinary research program in immunology.

Hirsh J, Regoeczi E. Thromboembolism and haemostasis programme. J R Coll Physicians Lond 1972; 6:399-406.

Describes an interdisciplinary research program that has additional components in education and service.

HEALTH SERVICES:

* Baskin M. Together — we've got it all together! Gerontology/ Geriatrics. Network Dec 1985. McMaster University, Hamilton.

An overview of the gerontology/geriatrics network with emphasis on the university-based Office of Gerontological Studies and the R. Samuel McLaughlin Centre for Gerontological Health Research.

Brain MC, Haggar RA, Moore S et al. The Hamilton District Program in Laboratory Medicine: a progress report on integration. Can Med Assoc J 1976; 114: 721-2, 725-6.

A comprehensive report on how the district-wide program in laboratory medicine was conceived, implemented and evaluated.

Brandstater ME. Rehabilitation. J R Coll Physicians Lond 1972; 6:415-18.

An early report on how rehabilitation services and training in rehabilitation medicine are organized in Hamilton.

* Cochran J. Ahead of its time: The Hamilton Health Sciences Laboratory Program. Network April 1985. McMaster University, Hamilton.

A description of the district-wide program in laboratory medicine operated by three Hamilton hospitals and McMaster University.

* Cochran J. An idea whose time has come. Network Nov/Dec 1986. McMaster University, Hamilton.

A description of one of Canada's first Teaching Health Units. Developed by the Regional Municipality of Hamilton-Wentworth's Department of Health Services and McMaster University. the Unit has responsibilities in education, research and service and is staffed by personnel with dual accountability to the Department of Health Services and the University.

* Cochran J. Electron microscopy. Network May 1986. McMaster University, Hamilton.

A report on the Electron Microscope Facility in McMaster's Health Sciences Centre which provides diagnostic services to all hospitals in Hamilton and the McMaster health care region and to health sciences researchers.

* Green S. Forensic pathology: A venerable profession. Network July/Aug 1985. McMaster University, Hamilton.

A report on the Regional Forensic Pathology Unit in the Hamilton General Hospital, the only such unit in Ontario which is both hospital-based and hospital-funded.

* Hamilton-Wentworth District Health Council Information and Orientation Package. Hamilton-Wentworth District Health Council. Hamilton, Ontario. Periodically updated.

Describes the role of Ontario's district health councils and gives specific information about the Hamilton-Wentworth District Health Council and its activities, and the Regional Municipality of Hamil-

ton-Wentworth and its health care resources.

Latimer E. Palliative care. Network March 1986. McMaster University, Hamilton.

A description of the Regional Palliative Care Program in Hamilton, one of the first co-ordinated programs of its kind in Ontario.

The Red Book of Community Services. Community Information Service, Hamilton Wentworth. Hamilton, Ontario 1985-86. Published annually.

Designed for use by any agency, institution or individual, this directory of community services describes over 300 non-profit organizations, institutions and selected government department in the Regional Municipality of Hamilton-Wentworth.

LIBRARY SERVICES

Marshall JG, Neufeld VR. A randomized trial of librarian educational participation in clinical settings. J Med Educ 1982; 56:409-16.

An evaluation of the clinical librarian's role in improving the information-seeking behaviour of health professionals. The project was carried out in four patient care settings at the McMaster Division of Chedoke-McMaster Hospitals in 1978/79.

Panton LA. The Hamilton-Wentworth Library Network. Bibliotheca Medica Canadiana 1985; 7(2):75-77.

An overview of the background, services, cost-sharing arrangements and current projects of this regional health library service founded in 1969. Describes the role of McMaster Health Sciences Library and the Network Coordinator.

Robinow BH. Audiovisuals and non-print learning resources in a health sciences library. J Biocommun 1979; 6(1):14-9.

Describes the way in which resources developed by McMaster's Faculty of Health Sciences to accompany its self-directed problem-based approach to learning were incorporated into the McMaster Health Sciences Library.

Robinow BH. New Medical Library Buildings IV: The Health Sciences Library, McMaster University. Bull Med Libr Assoc 1972; 60(4):559-565.

Describes the design of Ontario's fifth and newest medical school library and multimedia centre. Outlines how the McMaster teaching system influenced the plans for these facilities.

THE HEALTH SCIENCES CENTRE

Lee BL. McMaster builds a fitting home for its innovative health care program. Can Med Assoc J 1972; 107:574-7.

An article written at the time of the official opening of the McMaster University Health Sciences Centre, describing the new facility.

Zeidler EH. Healing the hospital. McMaster Health Sciences Centre: Its conception and evolution. 167 p. Toronto, Ont: Zeidler Partnership, 1974.

Written by the architect who designed the McMaster University Health Sciences Centre, this book describes in detail the building and its harmony of function and design.

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